L 6938-66

ENCL: 01

ACCESSION NR: AT6011176

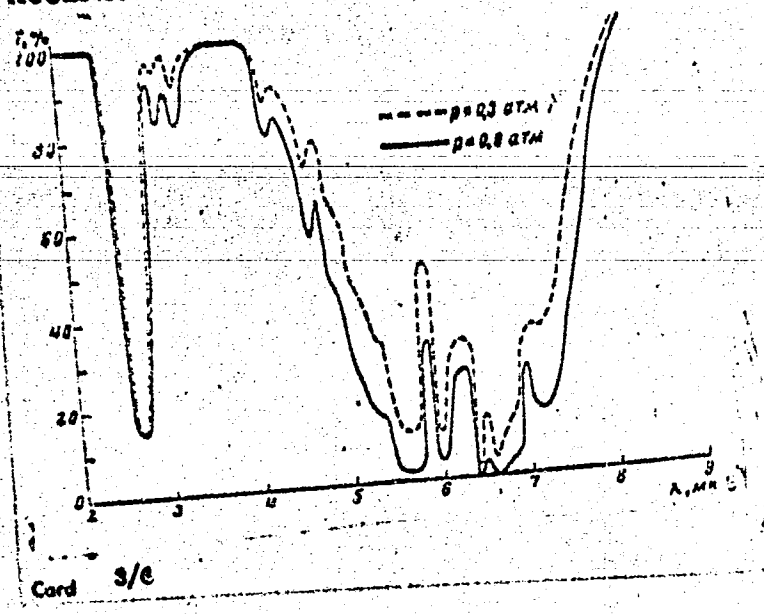

Fig. 1. Spectral transmission of radiation in the range 2-8.5μ by water vapor bands for a precipitable layer of water $\mu = 1.2$ cm for two pressures at heights of 10 and 1 km. A) $a_\lambda m$; B) μ.

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L 6938-66

ENCL: 02

ACCESSION NR: AT5011176

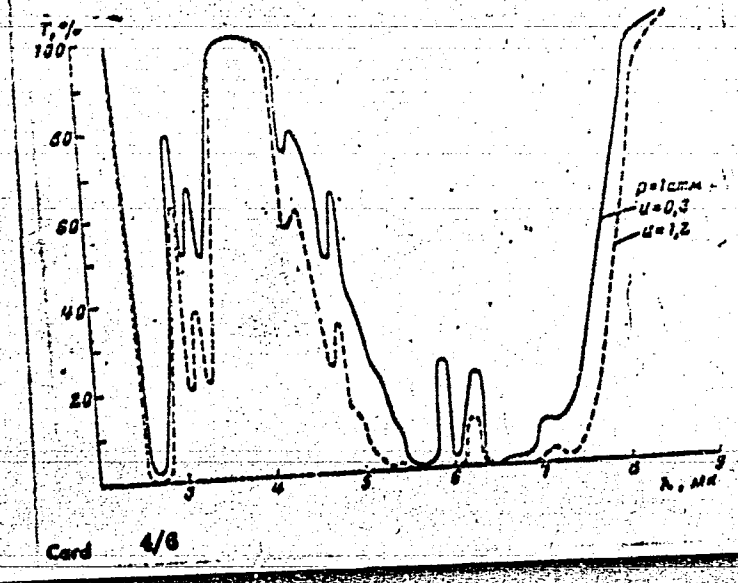

Fig. 2. Spectral transmission of radiation in the range 2-3.5μ by water vapor bands in the surface layer for two values of the precipitable layer of water; A) atm; B) μ.

Card 4/6

L 6938-66

ACCESSION NR: AT5011176

ENCL: 03

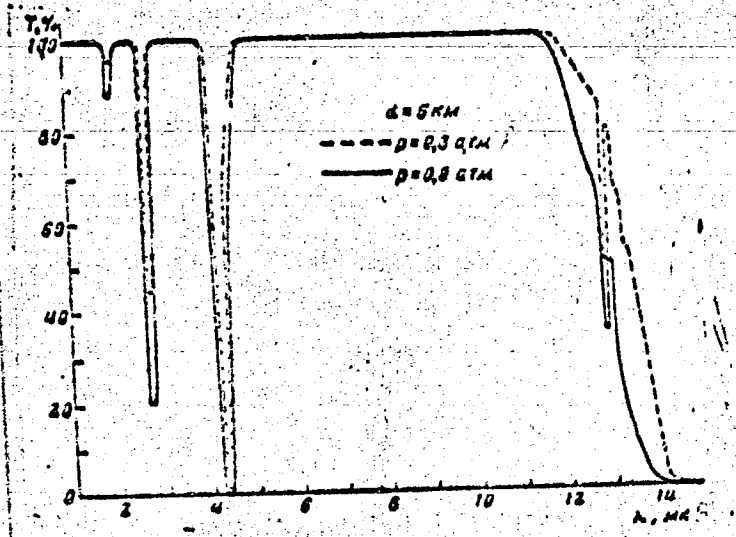

Fig. 3. Spectral transmission of radiation in the range 1-15μ by carbon dioxide bands at a distance d = 5 km at heights of 10 and 1 km. A) atm; B) μ.

Card 5/6

L 6938-66

ACCESSION NR: AT5011176 ENCL: 04

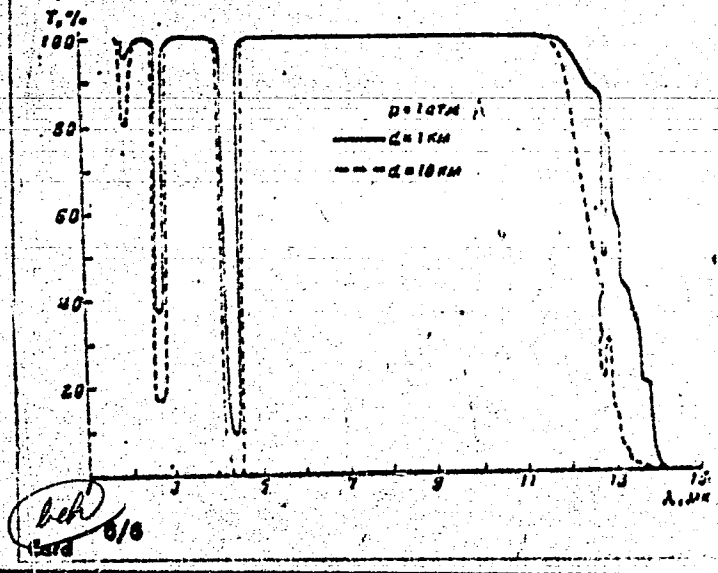

Fig. 4. Spectral transmission of radiation in the range 1-15μ by carbon dioxide bands in the surface layer at a distance d = 1 and 10 km. A) atm; B) μ.

KUYEV, [illegible]; [illegible]EV, B.F.; TVOROGOV, S.D.; KHMELEVTSOV, S.S.

Attenuation of the visible and infrared radiations by artificial water fogs. Izv. AN SSSR. Fiz. atm. i okeana 1 no.5:509-516 My '65. (MIRA 18:8)

TVOROGOV, S.D.

Determining the coefficient of light attenuation by a particle. Izv. vyss. ucheb. zav.; fiz. 8 no.3:147-148 '65. (MIRA 18:9)

1. Sibirskiy fiziko-tekhnicheskiy institut imeni V.D. Kuybyshev.

TVOROGOV, S.D.

Scalar approximation in the problem involving the scattering of a plane light wave on a sphere. Izv.vys. ucheb. zav.; fiz. 8 no.3: 175-176 '65. (MIRA 18:9)

1. Sibirskiy fiziko-tekhnicheskiy institut imeni V.D.Kuznetsova.

L 62995-65 EWT(1)/FCC GW

ACCESSION NR: AP5014228 UR/0362/65/001/005/0509/0516

AUTHOR: Zuyev, V. Ye.; Koshelev, B. P.; Tyor-gov, S. D.; Khmel'tsov, S. S. 33 31

TITLE: Attenuation of visible and infrared radiation by artificial fogs 12,55

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 1, no. 5, 1965, 509-516

TOPIC TAGS: cloud physics, fog, IR radiation, atmospheric physics, atmospheric optics

ABSTRACT: The optical and microphysical properties of fog were investigated theoretically and experimentally by a group associated with the Siberian Physicotechnical Institute. Data on the attenuation of visible and infrared radiation in fogs calculated with allowance for polydispersion and absorption in water droplets were compared with results of experimental determinations of the spectral transmittance of artificially created fog.

Card 1/6

L 62995-65

ACCESSION NR: AP5014228

In the theoretical part of the study, approximate expressions were derived for determining the aerosol attenuation $\alpha(\lambda)$ of clouds and fog. Calculations were performed for values of λ ranging from 0.5 to 14 microns and for values of r (the most probable distribution radius) and μ (parameter characterizing the distribution half-width) of the drop-size distribution function of natural water clouds and fog. Parameter r ranged from 2 to 10 microns, and μ, from 1 to 10 microns. Figs. 1 and 2 show the results of calculations of $\alpha(\lambda)/\alpha(0.5)$ for wavelengths ranging from 1 to 14 microns. It is evident from the figures that the spectral behavior of the relative attenuation essentially depended on the parameters of the drop-size distribution function.

On the basis of an analysis of the theoretical results, the following conclusions were drawn: 1. In the visible region, $\alpha(\lambda)$ is practically independent of wavelength for all clouds and fogs. 2) In the 10.5—12.2-micron region, transmittance is higher than it is in the visible region. 3) With

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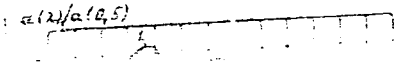
L 62995-65
ACCESSION NR: AP5014228



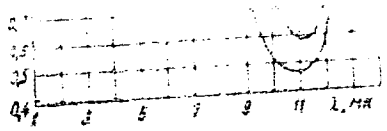
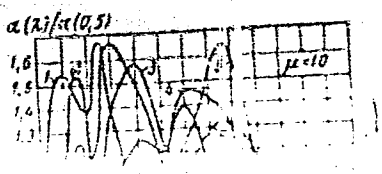


Fig. 1. Calculated relative attenuation as a function of wavelength for μ = 2

1 - r = 2; 2 - r = 3; 3 - r = 4;
4 - r = 5; 5 - r = 8; 6 - r = 10.



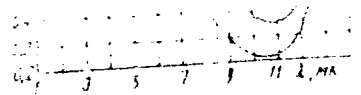


Fig. 2. Calculated relative attenuation as a function of wavelength for μ = 10. Designations of curves are the same as in Fig. 1.

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L 62905
ACCESSION NR: AP5014228

increased distribution half-width (decreased ν) or r, the transmittance maximum shifts toward the longer-wave region, but does not go beyond 10--12 microns. 4) In the 1--5-micron region, transmittance for any microstructure characteristics is lower than it is in the visible region. The ratio $\alpha(\lambda)/\alpha(0.5)$ reaches its maximum of 1.76 at $\lambda = 3.5$ microns and $\nu = 10$, $r = 2$ microns. 5) In the spectral regions of 5—10.5 and 12.2—14 microns, transmittance depends on microstructure parameters and can either be higher or lower than it is in the visible region. 6) The spectral behavior of the aerosol attenuation of clouds and fogs in the 1—14- [illegible] range depends on the [illegible] distribution half-width [illegible], for clouds ($r = 6$—10 microns) [illegible] investigated range. 7) [illegible] aerosol attenuation in [illegible] water absorption bands is [illegible] behavior of transmittance [illegible] in the [illegible] vior of the complex refractive index.

Card 4/6

L 62995-65

ACCESSION NR: AP5014228

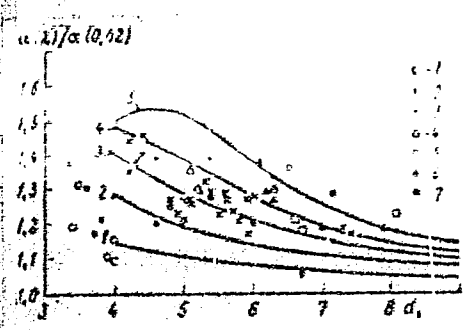

Fig. 3. Comparison of experimental and theoretical relative attenuation as a function of RMS values of fog particle diameters for λ = 2.6 microns

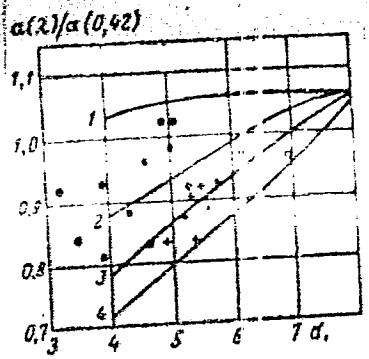

Fig. 4. Comparison of experimental and theoretical relative attenuation as a function of RMS values of fog particles for λ = 14 microns

Symbols represent the results of experimental measurements. Solid curves are calculated for various u. 1 - u = 1; 2 - u = 2; 3 - u = 3; 4 - u = 4; 5 - u = 5; 6 - u = 6; 7 - u = 7.

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L 62995-65
ACCESSION NR: AP5014228 2

The theoretical results were compared with experimental data obtained in artificial fogs. The equipment used in the experiments was capable of measuring fog particles ranging in size from the very largest to 0.8—1.0 microns in diameter. Over 2000 spectral measurements were made from 800 droplet samples from 120 artificially created fogs. The optical density [illegible] 0.1 and 1.6 and the attenuation at 0.45 micron varied between 2 x 10[illegible] and 6.5 x 10[illegible] cm^{-1}. For the [illegible] 14 micron region comparisons were made of calculated and experimental values of relative attenuation as a function of RMS values of fog-particle diameters for various u. Figs. 3 and 4 show these values for the 2.6- and 14.0-micron wavelengths. These figures are typical of the satisfactory agreement between experimental and theoretical values over the entire investigated range. Orig. art. has: 4 graphs.

ASSOCIATION: Sibirskiy Fiziko Tekhnicheskiy Institut (Siberian Physical-Technical Institute)

SUBMITTED: 10Mar64	ENCL: 00	SUB CODE: ES
NR REF SOV: 005	OTHER: 004	FSB v.1,no.9

Card 6/6

L 27762-65 EWT(1)/FCC PI-4 GS/GW UR/0000/64/000/000/0096/0101
ACCESSION NR: AT5011101

AUTHOR: Zuyev, V. Ye.; Kabanov, M. V.; Kosheleva, B. P.; Tvorogov, S. D.; Khmelevtsov, S. S.

TITLE: Spectral transparency and microstructure of artificial fogs

SOURCE: Meshvedomstvennoye soveshchaniye po aktinometrii i optike atmosfery. 5th, Moscow, 1963. Aktinometriya i optika atmosfery (Actinometry and atmospheric optics); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 96-101

TOPIC TAGS: artificial fog, spectral transparency, artificial fog microstructure, aerosol, fog

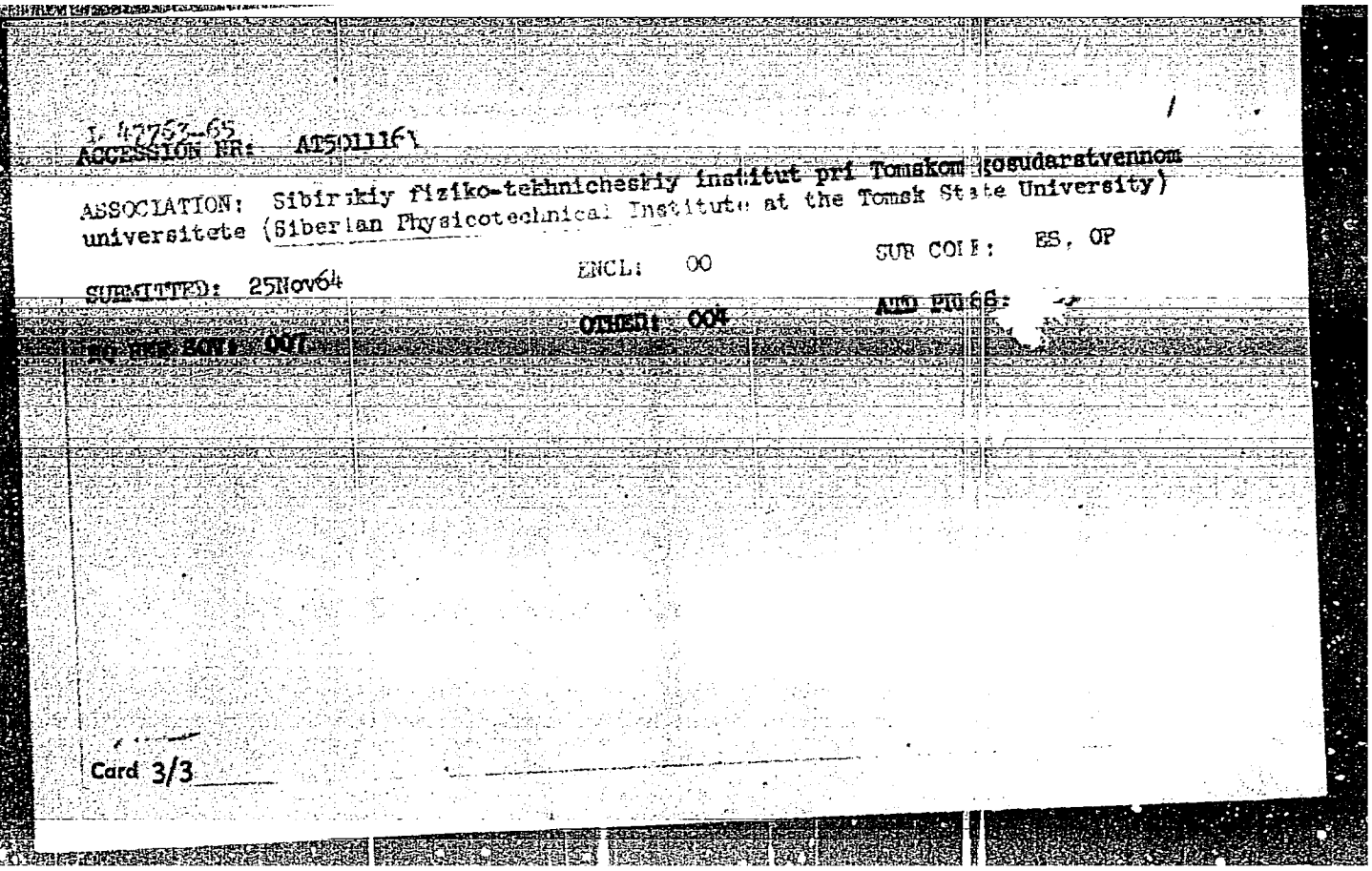
ABSTRACT: The article discusses the results of a comprehensive theoretical and experimental investigation of the optical and microphysical properties of artificial fogs. [illegible] of attenuation for a polydisperse [illegible] material. Simultaneously performed measurements of the spectral transparency of the fogs in the visible and infrared [illegible]

Card 1/3

possible to quantitatively compare the theoretical and experimental data. The calculations show that the spectral variation of the relative attenuation coefficient depends greatly on the particle size distribution. In all cases the transparency of a fog is lower in the 2 — 5μ region than in the visible region, whereas in the 10 — 12μ region all fogs are more transparent than in visible light wavelength. In the 5 — 10μ region, the transparency can be either smaller or

spectral optical measurements were made in an [illegible] volume, using a specially constructed photometer and an IKS-6 infrared spectrometer for the measurement of the transparency in the physical and infrared regions. All optical and microphysical measurements were made for the spectral region near 0.42 and simultaneously in the infrared region at 2.15, 3.7, 5.3, 8.0, 10.0, and 11.8 . The optical density of the fogs ranged from 0.2 to 1.5, and the attenuation for visible light ranged from 2×10^{-4} to 52×10^{-4} cm^{-1}. The agreement [illegible] once account is taken of appreciable experimental errors. Orig. art. has: 4 figures and 10 formulas. [02]

Card 2/3



L 47753-65
ACCESSION NR: AT5011161

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete (Siberian Physicotechnical Institute at the Tomsk State University)

SUBMITTED: 25Nov64 ENCL: 00 SUB CODE: ES, OP

NO REF SOV: 007 OTHER: 004 AND PROG:

Card 3/3

TVOROGOV, S.D.

Optical properties of aerosol. Trudy Astrofiz.inst.AN Kazakh. SSR 3:105-107 '62. (MIRA 16:11)

TVOROGOV, S.D.

On certain representations of an analytic expression for the coefficient of light attenuation of the aerosol component of the atmosphere. Izv.vys.uch.zav.; fiz. no.4:175-176 '62. (MIRA 15:9)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni V.V. Kuybysheva.
(Atmospheric transparency)

S/913/62/003/000/017/033
D405/D301

AUTHOR: Tvorogov, S.D.

TITLE: On calculating the optical characteristics of aerosols

SOURCE: Akademiya nauk Kazakhskoy SSR. Astrofizicheskiy institut. Trudy. v. 3. 1962, Rasseyaniye i polyarizatsiya sveta v zemnoy atmosfere; materialy Soveshchaniya po rasseyaniyu i polyarizatsii sveta v atmosfere. 105 - 107

TEXT: The author derives a formula for the numerical calculation of the optical characteristics of aerosols whereby the computational work is considerably reduced as compared to other formulas for numerical integration; this was proved in praxis. The deduction of the formula is based on the assumption that the density of the size distribution function of particles is described by a normal-logarithmic law. The formula which has to be integrated is

On calculating the optical ...

$$F(z,t) = e^{-t/4} \cdot \frac{1}{\sqrt{\pi t}} \int_0^{\infty} \tau^2 e^{-1/t(1n\tau)^2} K(z,\tau)d\tau . \qquad (3)$$

where $z=2\pi r/\lambda$; λ is the wavelength of the incident light and K is the extinction function introduced in Mie's theory. After calculations, one obtains the following formula for the numerical integration of (3)

$$\psi_{i,k} = \frac{1}{2^k} \sum_{p=0}^{k} \varphi_{i-k+2p} \cdot C_k^p , \qquad (10)$$

where C_k^p is the binomial coefficient and ψ is a function which satisfies the heat-flow equation. Formula (10) was obtained by the method of nets. This formula can be also used for calculating the scattering function and other elements of the scattering matrix.

Card 2/2

TVOROGOV, S.D.

Theory of light scattering by a highly disperse system of spherical particles. Izv.vys.ucheb.zav.; fiz. no.1:87-93 '61. (MIRA 14:7)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni V.V.Kuybysheva.
(Light—Scattering) (Atmospheric transparency)
(Aerosols)

TVOROGOV, S. D.

Possibility for using the method of difference in calculating the coefficient of light attenuation for the aerosol component of the atmosphere. Izv. vys. uch. zav.; fiz. 3:174-175 '62. (MIRA 15:10)

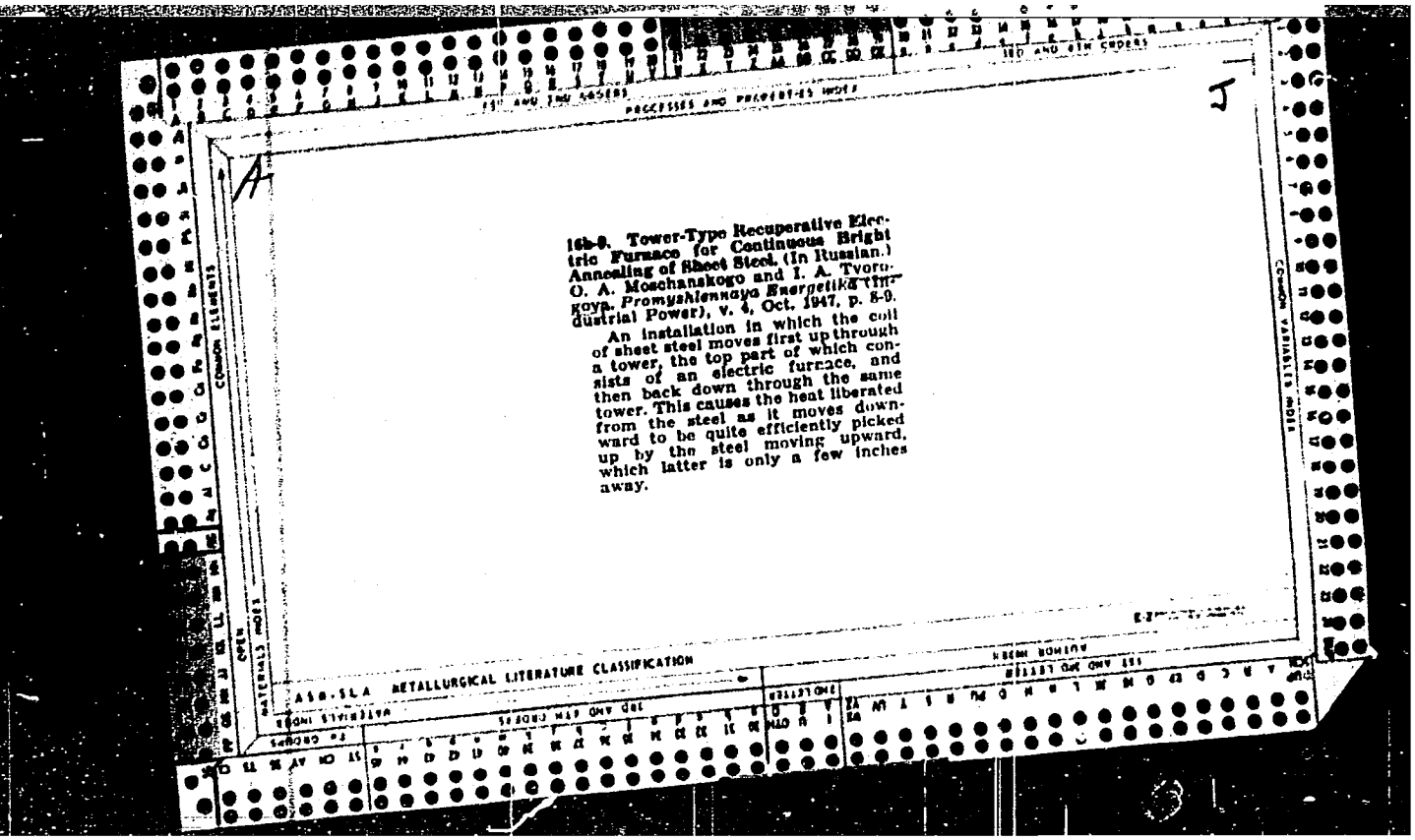
1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.

(Atmospheric transparency) (Aerosols)

TVOROGOVA, A. S.

Yu. A. Orfanitskiy, M. A. Fedchenko, and A. S. Tvorogova on "Soil Problems connected with the problem of clearance types.

report presented at the Conference on Forestry, Arkhangel'sk, 14-15 April 1958 (Vest. Ak Nauk SSSR, 1958, No. 7, pp. 133-4)



16b-9. **Tower-Type Recuperative Electric Furnace for Continuous Bright Annealing of Sheet Steel.** (In Russian.) O. A. Moschanskogo and I. A. Tvorogova. *Promyshlennaya Energetika* (Industrial Power), v. 4, Oct. 1947, p. 8-9.

An installation in which the coil of sheet steel moves first up through a tower, the top part of which consists of an electric furnace, and then back down through the same tower. This causes the heat liberated from the steel as it moves downward to be quite efficiently picked up by the steel moving upward, which latter is only a few inches away.

S/169/62/000/006/031/093
D228/D304

AUTHOR: Tvorogova, I. A.

TITLE: Abyssal geologic structure of Turkmeniya's north-west part according to aeromagnetic data

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 6, 1962, 30, abstract 6A221 (Tr. Vses. n.-i. geol. in-ta, 46, 1961, 64-71)

TEXT: The results of the interpretation of aeromagnetic survey data are described. Mass determinations of the Paleozoic basement's depth were made, and a schematic map was constructed for the depths of the disturbing bodies. [Abstracter's note: Complete translation.]

Card 1/1

TVOROGOVA, I.A.

Subsurface geology of northwestern Turkmenia according to aeromagnetic data. Trudy VSEGEI 46:64-71 '61. (MIRA 14:11)
(Turkmenistan--Magnetic prospecting)

TVOROGOVA; BADAMYAN; KURNOSOV,M.A.; ZAGATIN,M.F.; REYTMAN,I.M., redaktor; PETROVA,Ye.A., redaktor; TROFIMOV,A.V., tekhnicheskiy redaktor

[Catalog of spare parts for petroleum equipment] Katalog zapasnye k neftianomu oborudovaniiu. Moskva, Gos.nauchno-tekhn.izd-vo neftianoi i gorno-toplivnoi lit-ry. Pt.2.[Equipment for drilling wells. Section 1. Drill winches. No.2. Four-speed drill winch, model L1-4M2] Oborudovanie dlia bureniia skvazhin. Section 1. Lebedki burovye. No.2. Lebedka chetyrekhskorostnaia L1-4M2. 1955. 33 p. Pt.3. [Equipment for operating wells. Section 2. Deep well non-insert (pipe) pumps. No.4. NGN2-56. Section 3. Deep well insert pumps. No.5.NGN3-56 3"-1800 (NGB1-56)] Oborudovanie dlia ekspluatatsii skvazhin. Section 2. Nasosy glubinnye nevstavye (trubnye). No.4. NGN2-56. 1955.15 p. Section 3 Nasosy glubinnye vstavye. No.5. NGN3-56 "3-1800 (NGV1-56). 1955. 10 p. (MIRA 9:3)

1. Soyuzneftеburmashremont, Gosudarvennyy soyuznyy trest. (Oil well pumps) (Petroleum industry--Equipment and supplies)

ABRAMOV, M.A.; ALIVERDIZADE, K.S.; AMIROV, Ye.M.; ARENSON, R.L.; ARSEN'YEV, S.I.; BAGDASAROV, R.M.; BAGDASAROV, G.A.; BADAMYANTS, A.A.; DANIYELYAN, G.N.; DZHAFAROV, A.A.; KAZAK, A.S.; KERCHEVSKIY, M.M.; KONYUKHOV, S.I.; KRASNOBAYEV, A.V.; KURKOVSKIY, A.I.; LALAYAROV, G.S.; LARIONOV, Ye.P.; LISTENGARTEN, M.Ye.; LIVSHITS, B.L.; LISIKYAN, K.A.; LOGINOVSKIY, V.I.; LYSENKOVSKIY, P.S.; MOLCHANOV, G.V.; MAYDEL'MAN, N.M.; OKHON'KO, S.K.; ROMANIKKIN, V.A.; ROSIN, I.I.; RUSTAMOV, E.M.; SARKISOV, R.T.; SKRYPNIK, P.I.; SOBOLEV, N.A.; TARATUTA, R.N.; TVOROGOVA, L.M.; TER-GRIGORYAN, A.I.; USACHEV, V.I.; FAYN, B.P.; CHICHEROV, L.G.; SHAPIRO, Z.L.; SHEVCHUK, Yu.I.; TSUDIK, A.A.; ABUGOV, P.M., red.; MARTYNOVA, M.P., vedushchiy red.; DANIYELYAN, A.A.; TROFIMOV, A.V., tekhn.red.

[Oil field equipment; in six volumes] Neftianoe oborudovanie; v shesti tomakh. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry. Vol.3. [Petroleum production equipment] Oborudovanie i instrument dlia dobychi nefti. 1960. 183 p. (MIRA 13:4)

(Oil fields--Equipment and supplies)

TVORCOV, N.N.; KOROLEV, G.V.

Polymerization of highly viscous media and three-dimensional polymerization. Part 5: Apparatus for studying unsteady state kinetics (pre- and post-effect) in the case of the polymerization of polyester acrylates. Vysokom.soed. 6 no. 5:877-882 My '64. (MIRA 17:5)

1. Institut khimicheskoy fiziki AN SSSR.

L 19394-66 EWT(1)/FCC GW/GS

ACCESSION NR: AT5011176 UR/0000/64/000/000/0223/0226

AUTHOR: Zuyev, V. Ye.; Nesmelova, L. I.; Sapozhnikova, V. A.; Tyurogov, S. D.

TITLE: Calculations of atmospheric transparency for infrared radiation

SOURCE: Mezhvedomstvennoye soveshchaniye po aktinometrii i optike atmosfery. 5th, Moscow, 1963. Aktinometriya i optika atmosfery (Actinometry and atmospheric optics); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 223-226

TOPIC TAGS: infrared radiation, atmospheric water vapor, atmospheric transparency, atmospheric light absorption, atmospheric optics

ABSTRACT: Precise computation of the absorption coefficient and the absorption function for the infrared absorption spectra of the principal absorbing components of the atmosphere is discussed. Such computations require knowledge of a large number of parameters characterizing both the molecule whose absorption spectrum is radiated and the transitions causing the presence of these lines and bands. Since much computation work is involved, simplification has been sought by using models of absorption bands. In this paper, the quasi-statistical model is used (V. R. Stull, P. J. Wyatt, G. N. Plass, Final report of the theoretical study of infrared radiative behavior of flames, 1961). In this approach, the

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L 19394-66
ACCESSION NR: AT5011176

statistical model is applied to a quite narrow spectral range so that, within this interval, any position of lines is equi-probable. The values for water vapor, carbon dioxide and ozone used in this paper were taken from the literature. Computations of absorption in the ozone band were made for heights of 10 and 21 km. The results are shown in Figures 1-4 of the Enclosure. Figures 1 and 2 show the spectrum of the water vapor and carbon dioxide bands (with overlapping taken into account) for pressures of 1 and 0.3 atm. Fig. 3 shows the absorption spectrum of water vapor for different pressures. Fig. 4 shows the absorption of carbon dioxide. Orig. art. has: 4 figures.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete (Siberian Physics and Technology Institute at Tomsk State University)

SUBMITTED: 26Nov64 ENCL: 04 SUB CODE: ES

NO REF SOV: 001 OTHER: 004

Card 2/6

L 19394-66

ACCESSION NR: AT5011176

ENCL: 01

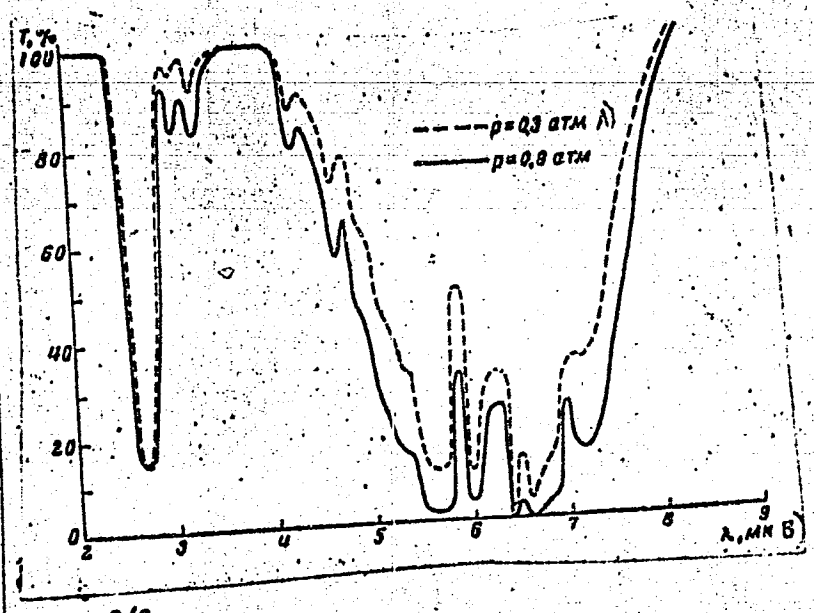

Fig. 1. Spectral transmission of radiation in the range 2-8.5μ by water vapor bands for a precipitable layer of water $\mu = 0.2$ cm for two pressures at heights of 10 and 1 km. A) atm; B) μ.

Card 3/6

L 19394-66
ACCESSION NR: AT5011176

ENCL: 02 O

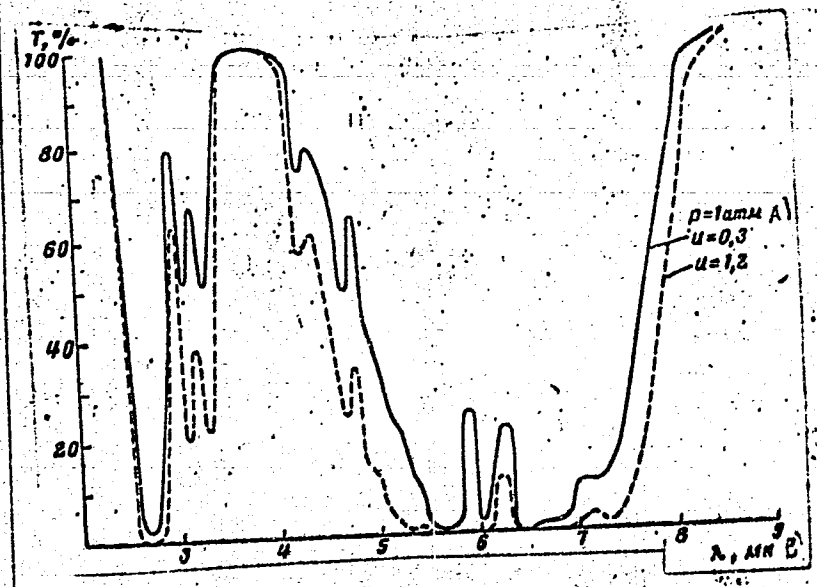

Fig. 2. Spectral transmission of radiation in the range 2-8.5μ by water vapor bands in the surface layer for two values of the precipitable layer of water; A) atm; B) μ.

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L 19394-66
ACCESSION NR: AT5011176

ENCL: 03

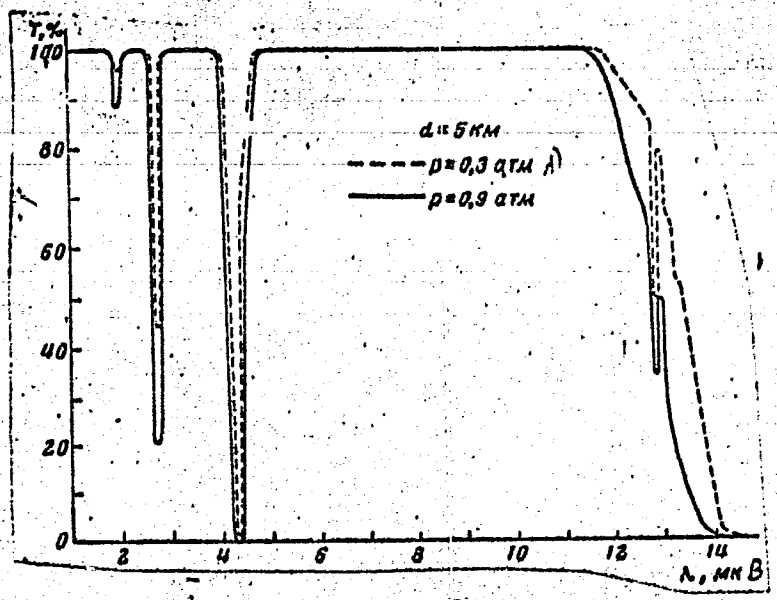

Fig. 3. Spectral transmission of radiation in the range 1–15μ by carbon dioxide bands at a distance d = 5 km at heights of 1) and 1 km. A) atm; B) μ.

Card 5/6

ZUYEV, V.Ye.; TVOROGOV, S.D.

Informative announcement on the intercollegiate scientific conference on the spectral transparency of the atmosphere in the visible and infrared spectral regions. Izv. vys. ucheb. zav.; fiz. 8 no.4:185-186 '65. (MIRA 18:12)

1. Sibirskiy fiziko-tekhnicheskiy institut imeni V.D. Kuznetsova.
Submitted July 16, 1965.

ZUYEV, V.Ye.; KABANOV, M.V.; KOSHELEV, B.P.; TVOROGOV, S.D.; KHMELEVTSOV, S.S.

Spectral transparency and microstructure of man-made fogs. Part 1. Izv. vys. ucheb. zav.; fiz. no. 2:90-97 '64. (MIRA 17:6)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni V.V.Kuybysheva.

ACCESSION NR: AP4036563 S/0139/64/000/002/0090/0097

AUTHORS: Zuyev, V. Ye.; Kabanov, M. V.; Koshelev, B. P.; Tvorogov, S. D.; Khmelevtsov, S. S.

TITLE: Spectral transparency and microstructure of artificial fog. 1

SOURCE: IVUZ. Fizika, no. 2, 1964, 90-97

TOPIC TAGS: fog, spectral transparency, infrared spectrometer, photometer, droplet concentration, water content, spectrometer IKS 6, photometer FEU 22

ABSTRACT: The details of an experimental analysis in the study of artificial fog microstructure and spectral transparency are presented. All measurements were made in artificial fog created by evaporation in a 15^3 m chamber. An IKS-6 infrared spectrometer was used to determine transparency in the region 2-15 μ, and a photometer FEU-22 was used to determine the transparency in regions 0.42, 0.68, 0.94 and 1.03 μ with 20-30 m μ width. Probes were placed in the chamber to determine droplet concentration, droplet distribution functions and parameters, and water content of the mist. The instruments included flow traps of shaft and reel type, curvilinear flow traps for fine-droplet capture, and optical instruments with remote control. An attempt was made to measure spectral transparency simultaneously with

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ACCESSION NR: AP4036563

taking microstructure measurements determined from parameters:

$$q = \frac{\pi}{6}\sum_i n_i d_i^3 ; \quad d_2 = \sqrt{\frac{\Sigma n_i d_i^2}{\Sigma n_i}} ; \quad d_3 = \sqrt[3]{\frac{\Sigma n_i d_i^3}{\Sigma n_i}} ,$$

where q - water content of fog, d_2 - mean squared diameter, d_3 - mean cubic diameter, n_i - droplet concentration. The results show that (for droplets with diameters greater than 3 μ) the capture coefficient of curvilinear flow traps is unity. A parameter was found for correlating the microstructure data given by: $k_{0.42}/2S_g = C$, where S_g - geometric cross section of droplet per unit volume, $k_{0.42}$ - attenuation coefficient, and C varies between 1 and 7. A graph of $k_\lambda/k_{0.42}$ versus λ for $d_2 = 14$ μ shows a "transmission window" in the vicinity of 10 μ. This "window" moves towards larger wavelengths as the droplet mean squared diameter increases. Orig. art. has: 4 figures, 2 formulas, and 1 table.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V. V. Kuyby*sheva (Siberian Physicotechnical Institute, Tomsk State University)

SUBMITTED: 04Jun63 DATE ACQ: 05Jun64 ENCL: 00

SUB CODE: ES NO REF SOV: 013 OTHER: 003

Card 2/2

ZUYEV, V.Ye.; TVOROGOV, S.D.

Calculating the absorption function for nonuniform paths.
Izv. vys. ucheb. zav.; fiz. 8 no.6:84-86 '65.
(MIRA 19:1)

1. Sibirskiy fiziko-tekhnicheskiy institut imeni V.D.
Kuznetsova. Submitted July 15, 1964.

L 39618-66
ACC NR: AP6002086 SOURCE CODE: UR/0139/65/000/006/0084/0086

AUTHOR: Zuyev, V. Ye.; Tvorogov, S. D.

ORG: Siberian Physico-Technical Institute im. V. D. Kuznetsov (Sibirskiy fiziko-tekhnicheskiy institut)

TITLE: Calculation of absorption functions for inhomogeneous beam paths

SOURCE: IVUZ. Fizika, no. 6, 1965, 84-86

TOPIC TAGS: atmospheric optics, absorption function, light attenuation, atmospheric scattering

ABSTRACT: Consideration of atmospheric transparency to inclined beams of light and the theory of radiation transfer in the atmosphere call for the computation of absorption functions for the case of variable pressure paths. In this connection, arguments are offered in favor of applying the method of weighted mean pressure $\bar{p}$

$$\bar{p} = \frac{\int_0^s \rho(s)\, p(s)\, ds}{\int_0^s \rho(s)\, ds},$$

to the problem of calculating the radiation absorption function $H = A(m,\bar{p})$, where H and A are absorption functions in the interval $\Delta\gamma = \nu'' - \nu'$ for the case of variable

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L 39618-66
ACC NR: AP6002086

and constant pressures along the beam path, ν is the frequency, and $m = \int \rho(s)\, ds$ for the case of a constant pressure along the light beam path. Results of calculations using the above formulas and numerical integration were compared and indicate that even under the most adverse conditions the relative error introduced by the derived formulas is of the oreder of 0.003 for spectral intervals of 0.1 μ and practically zero for larger spectral intervals. Orig. art. has: 12 formulas. [YK]

SUB CODE: 04 SUBM DATE: 15Jul64/ ORIG REF: 001/ OTH REF: 005/ ATD PRESS: 4166

Card 2/2

L 42072-66 EWT(1) RO/GW

ACC NR: AP6013466 SOURCE CODE: UR/0139/66/000/002/0143/0150

AUTHOR: Zuyev, V. Ye.; Tvorogov, S. D.

ORG: Siberian Physicotechnical Institute im. V. D. Kuznetsov (Sibirskiy fiziko-tekhnicheskiy institut)

TITLE: The effect of microstructure parameters of water clouds and fogs on their spectral transmittance in the 0.5-14 micron region

SOURCE: IVUZ. Fizika, no. 2, 1966, 143-150

TOPIC TAGS: atmospheric cloud, fog, cloud physics, distribution function, atmospheric refraction, optic transmission, optic spectrum

ABSTRACT: The averaged efficiency factor for radiation attenuation by water clouds and fogs is analyzed by considering their true polydispersion and their complex refractive index. The aerosol coefficients of water clouds and fogs are also examined.

The averaged efficiency factor (F) for radiation attenuation by water clouds and fogs is defined as the ratio of the attenuation coefficient of the aerosol component of the atmosphere to the particle cross section in a unit volume. By considering some special properties of the drop-size distribution function, which can be determined from logarithmically normal and gamma-distribution relations, several formulas are derived

Card 1/7

for calculating F. These expressions are then used to analyze qualitatively the dependence of F on the microstructure characteristics of water clouds and fogs.

The behavior of function F is analyzed for various values of β and μ, where β is the phase angle and μ is the parameter characterizing the distribution half-width. It is found that with increased β the maximum of F is decreased. This maximum varies with decreased μ, but only for small values of β. Thus, the maximum of F appears to be narrower the smaller the distribution half-width. This indicates that calculations of the spectral transmittance of water clouds and fogs made without considering their microstructure and complex refractive index will not yield reliable results.

Bearing this fact in mind, the aerosol attenuation coefficients $\alpha(\lambda)$ are also calculated and analyzed for various values of μ and r, where r is the most probable particle distribution radius.

The results of the calculations are illustrated in Figs. 1-6. The data presented in these figures cover practically all the different microstructure characteristics encountered in the atmosphere of liquid clouds and fogs.

L 12072-66
ACC NR: AP6013466

An analysis of the results yields the following conclusions:

In the visible region of the spectrum $\alpha(\lambda)$ and, consequently, the spectral transmittance of clouds and fogs are independent of wavelength.

In the 10.5—12.2 micron region, cloud and fog transmittance is always higher than it is in the visible region. Depending on the parameters of the microstructure, the ratio $\alpha(0.5)/\alpha(10.5—12.2)$ assumes values from 1 to 5. With increased distribution half-width (decreased μ) or increased r, the transmittance maximum shifts toward the longer wave region, but does not go beyond 10—12 microns.

In the 1—5 micron region, cloud and fog transmittance for any microstructure characteristics is lower than it is in the visible region. The ratio $\alpha(\lambda)/\alpha(0.5)$ reaches its maximum of 1.76 at λ = 3.5 microns, μ = 10, and r = 2 microns.

In the spectral regions of 5—10.5 and 12.2—14 microns, transmittance can either be higher or lower, depending on microstructure parameters.

The spectral behavior of the aerosol attenuation coefficients of clouds

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and fogs in the 3—4 and 10—12 micron regions is determined chiefly by the complex refractive index. In the entire range of wavelengths investigated, $\alpha(\lambda)$ depends essentially on microstructure parameters μ and r. The maximum difference in values of $\alpha(\lambda)$ is observed in the case of small-drop clouds and fogs at $\mu = 10$. In large-drop clouds with a large distribution half-width (r = 8—10 microns, $\mu = 1$—2), the behavior of the aerosol attenuation coefficients is practically independent of wavelength.

The results obtained illustrate the futility of numerous attempts to establish by purely empirical means a correlation between the transmittance and one of the wavelengths in the infrared region or in the visible region. The results, however, can be used to determine this correlation uniquely, provided parameters r and u are given.

L 42072-66
ACC NR: AP6013466

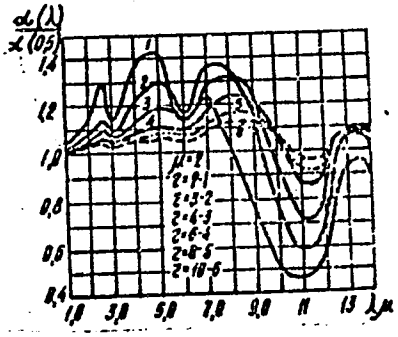

Fig. 1.

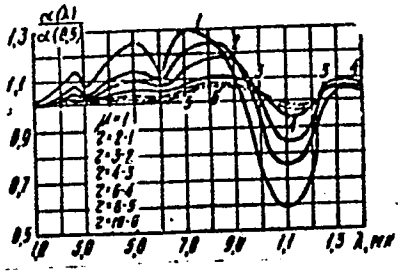

Fig. 2.

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L 12072-66

ACC NR: AP6013466

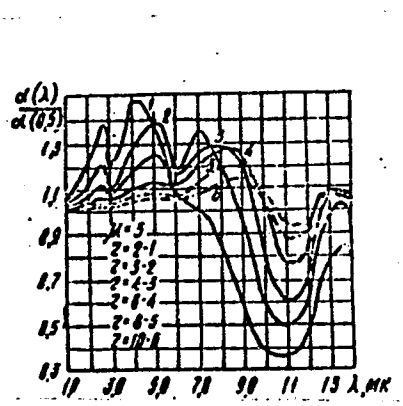

Fig. 3.

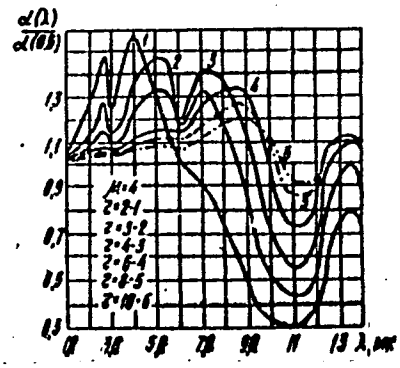

Fig. 4.

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L 42072-66
ACC NR: AP6013466

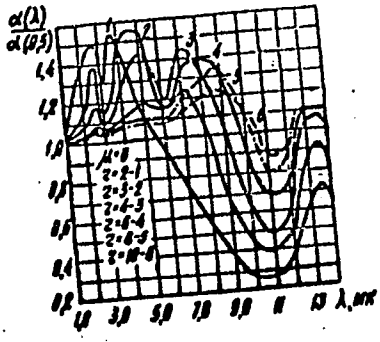


Fig. 5.

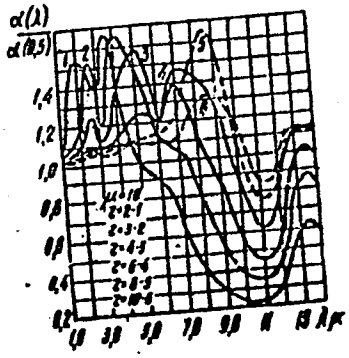


Fig. 6.

Orig. art. has: 14 figures and 14 formulas. [FSB: v. 2, no. 7]

SUB CODE: 04, 02 / SUBM DATE: 15Jul64 / ORIG REF: 014 / OTH REF: 004

Card 7/7 af

L 44211-66 EWT(1)/EWG
ACC NR: AP5021189 SOURCE CODE: UR/0139/65/000/004/0185/0186

52
B

AUTHOR: Zuyev, V. Ye; Tvorogov, S. D.

ORG: Siberian Physico-Technical Institute imeni V. D. Kuznetsov (Sibirskiy fiziko-tekhnicheskiy institut)

TITLE: Scientific conference on spectral transparency of the atmosphere

SOURCE: IVUZ. Fizika, no.,4, 1965, 185-186

TOPIC TAGS: atmosphere, atmospheric optics, atmospheric radiation, atmospheric transparency, laser radiation, meteorologic conference, molecular spectroscopy

ABSTRACT: An Interinstitutional Scientific Conference on the Spectral Transparency of the Atmosphere in the Visible and Infrared Spectral Regions has been held in Tomsk from 29 June—1 July 1965. Participating in the conference were 127 representatives from 15 cities; 45 papers were presented and discussed. The authors of the papers dealt mainly with the basic processes determining the transparency of the atmosphere: molecular absorption, scattering of light by aerosol particles, and propagation of waves in a turbulent dedium. Some papers described new equipment. It was noted at the conference that modern methods of molecular spectroscopy are being used in the research work dealing with the theoretical and experimental analysis of molecular ansorption in the

Card 1/2

L 44211-66
ACC NR: AP5021189

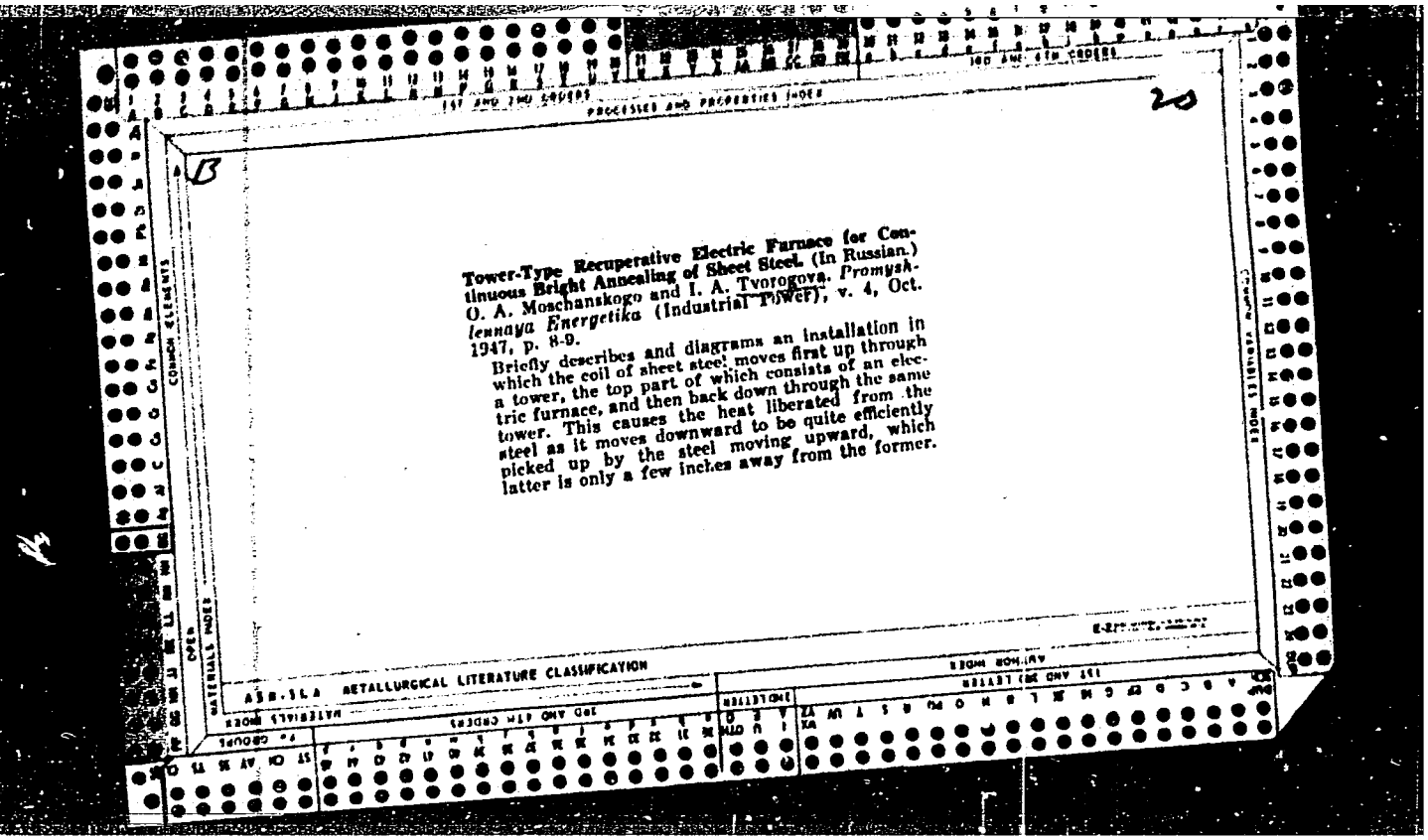
atmosphere. Analysis of the problem of light scattering by the particle system is also making progress from the poing of view of electrodynamic. Two new scientific and practical problems have begun to attract attention recently: particular features of the propagation of laser radiation in the atmosphere and interpretation of the optical and radiation data of the earth's artifical satellites. Since the problem of atmospheric transparency has important practical applications, many researchers have paid particular attention to the quantitative characteristics which determine the general decrease in the intensity of radiation propagted in the atmosphere. [JJ]

SUB CODE: 04, 20 / SUBM DATE: 16Jul65

Card 2/2

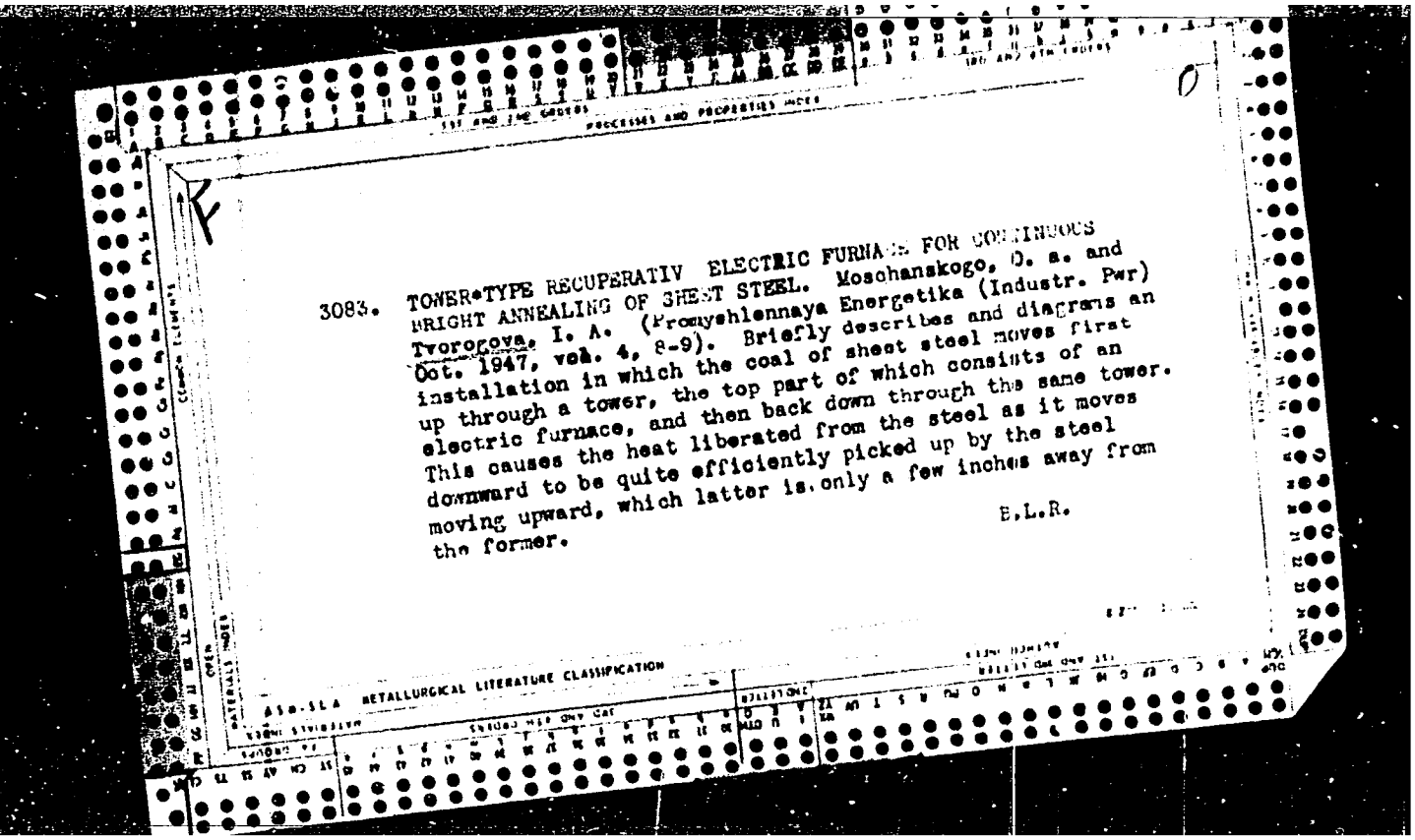
SKUZOVATOVA, A.P.; TVOROGOVA, R.S.; MESHCHERYAKOVA, T.I.

Hardening gear wheels with high-frequency currents. Stan.i instr. 33 no.7:31-32 Jl '62. (MIRA 15:7)
(Steel--Hardening)



Tower-Type Recuperative Electric Furnace for Continuous Bright Annealing of Sheet Steel. (In Russian.) O. A. Moschanskogo and I. A. Tvorogova. *Promyshlennaya Energetika* (Industrial Power), v. 4, Oct. 1947, p. 8-9.

Briefly describes and diagrams an installation in which the coil of sheet steel moves first up through a tower, the top part of which consists of an electric furnace, and then back down through the same tower. This causes the heat liberated from the steel as it moves downward to be quite efficiently picked up by the steel moving upward, which latter is only a few inches away from the former.



3083. TOWER-TYPE RECUPERATIV ELECTRIC FURNACE FOR CONTINUOUS BRIGHT ANNEALING OF SHEET STEEL. Moscharskogo, O. a. and Tvorogova, I. A. (Promyshlennaya Energetika (Industr. Pwr) Oct. 1947, vol. 4, 8-9). Briefly describes and diagrams an installation in which the coal of sheet steel moves first up through a tower, the top part of which consists of an electric furnace, and then back down through the same tower. This causes the heat liberated from the steel as it moves downward to be quite efficiently picked up by the steel moving upward, which latter is only a few inches away from the former.

B.L.R.

BLOKH, G.S.; ZABREBNEVA, A.V.; ZUBAREV, K.A.; PECHURO, S.S.; TVOROGOVA, Ye.L.; GNATYUK, T.A.

Producing gypsum fiber sheets on round-screen sheet-making machines. Stroi. mat. 8 no.2:15-17 F '62. (MIRA 15:3)
(Gypsum products)

PHASE I BOOK EXPLOITATION SOV/4020

Aviamodelizm; sbornik statey. Posobiye dlya rukovoditeley aviamodel'-nykh kruzhkov i uchiteley (Aircraft Modeling; Collection of Articles. Textbook for Instructors of Model Aircraft Clubs and Teachers) Moscow, Uchpedgiz, 1960. 141 p. 12,000 copies printed.

Compilers: E.B. Mikirtumov, Candidate of Technical Sciences, and N.S. Lebedinskiy, Candidate of Technical Sciences; Ed.: A.Ye. Stakhurskiy; Tech. Ed.: V.I. Korneyeva.

PURPOSE: This book is intended for instructors and directors of model airplane clubs sponsored by DOSAAF (All-Union Voluntary Society for Promotion of the Army, Navy, and Air Force).

COVERAGE: The book consists of 47 articles covering various aspects of model aircraft design, construction and operation. The text contains many illustrations and diagrams. No personalities are mentioned. There are 185 references, all Soviet.

TABLE OF CONTENTS:

27913
S/080/61/034/010/006/016
D245/D302

15.2420

AUTHOR: Tvorogov, N. N.

TITLE: A method of obtaining dielectric layers of alumina

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 10, 1961, 2203-2206

TEXT: Dielectric Al_2O_3 layers on Ta and W surfaces were prepared by thermal dissociation in vacuo of $Al(OC_2H_5)_3$. These layers had high density, transparency and clearly defined crystalline structure. Preparation of similar layers of SiO_2 and B_2O_3 by the author, described in previous papers is mentioned. (Ref. 1: ZhPKh, v. 32, 1959, 1043) and (Ref. 2: ZhPKh, v. 33, 1960. 2778) Comparison of the properties of compounds of the type $Me(OR)_n$ for R = Al, B and Si and for R = Ti, Zr and similar elements suggests the possibility of applying similar techniques to preparing oxide layers of these elements. There are 1 figure, 1 table and 10 references: 7 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language

Card 1/2

SOKOLENKOV, V.A.; TVORTSOV, M.K.

Seminar on standardization in Chuvashia. Standartizatsiia 27 no.2:52-53 F '63. (MIRA 16:4)

(Chuvashia—Standardization)

ZUYEV, V. Ye.; KABANOV, M. V.; KOSHELEV, B. P.; TVOROGOV, S. D.; KHMELEVTSOV, S. S.

"The influence of microstructure parameters of clouds and fogs on their spectral transmission in Region 0.5-14 Microns."

report presented at the Atmospheric Radiation Symp, Leningrad, 5-12 Aug 64.

BLOKH, G.S.; ZAGREBNEVA, A.V.; TVOROGOVA, Ye.L.

Filtration properties of gypsum fiber suspensions. Trudy NIIAsbest-tsementa no.17:90-102 '63. (MIRA 17:10)

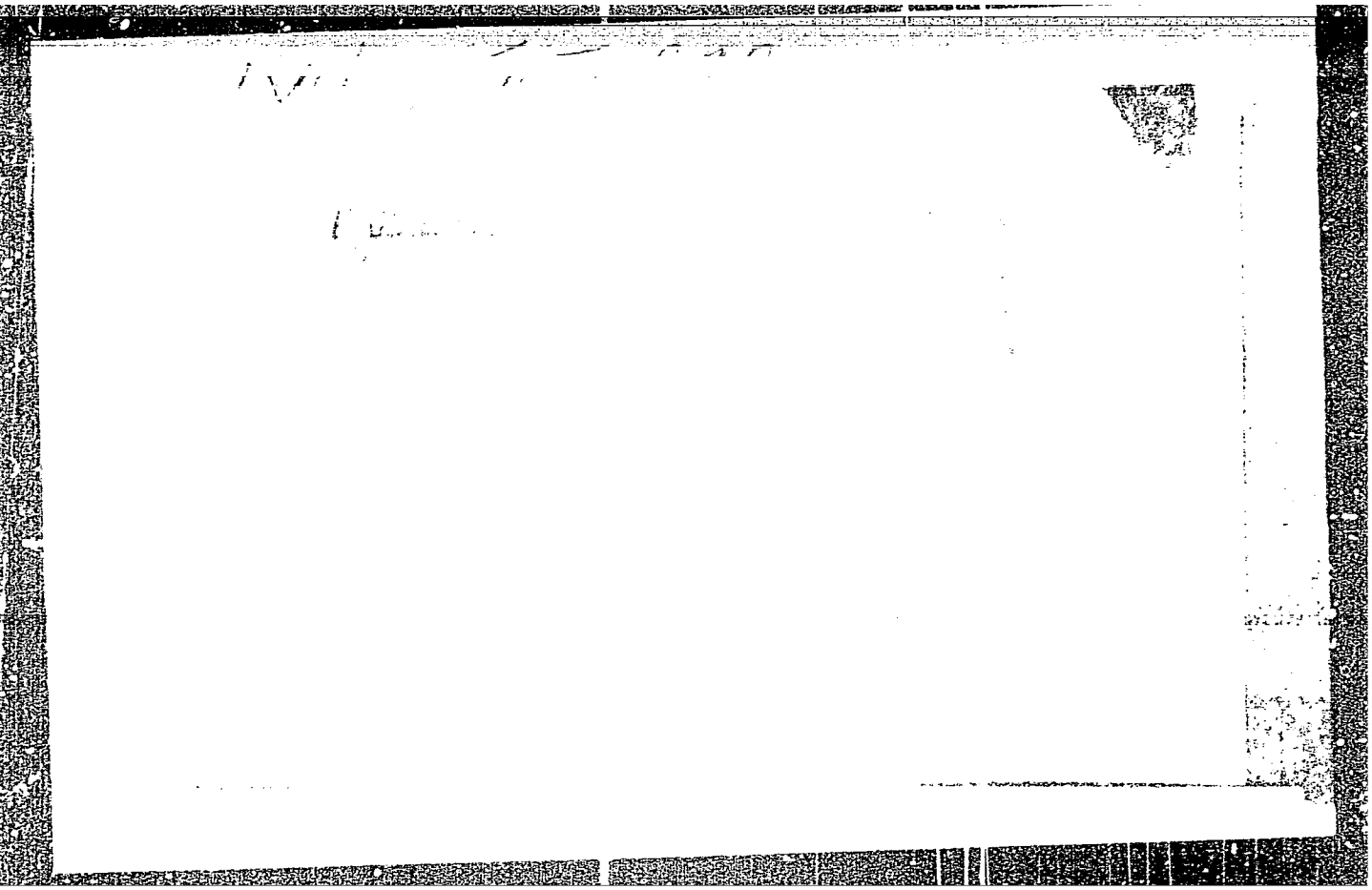
TVOROVSKIY, S.Ye., inzh.; VALLER, I.N., inzh.; BAB, A.F., inzh.; GRINTAN, M.D., inzh.

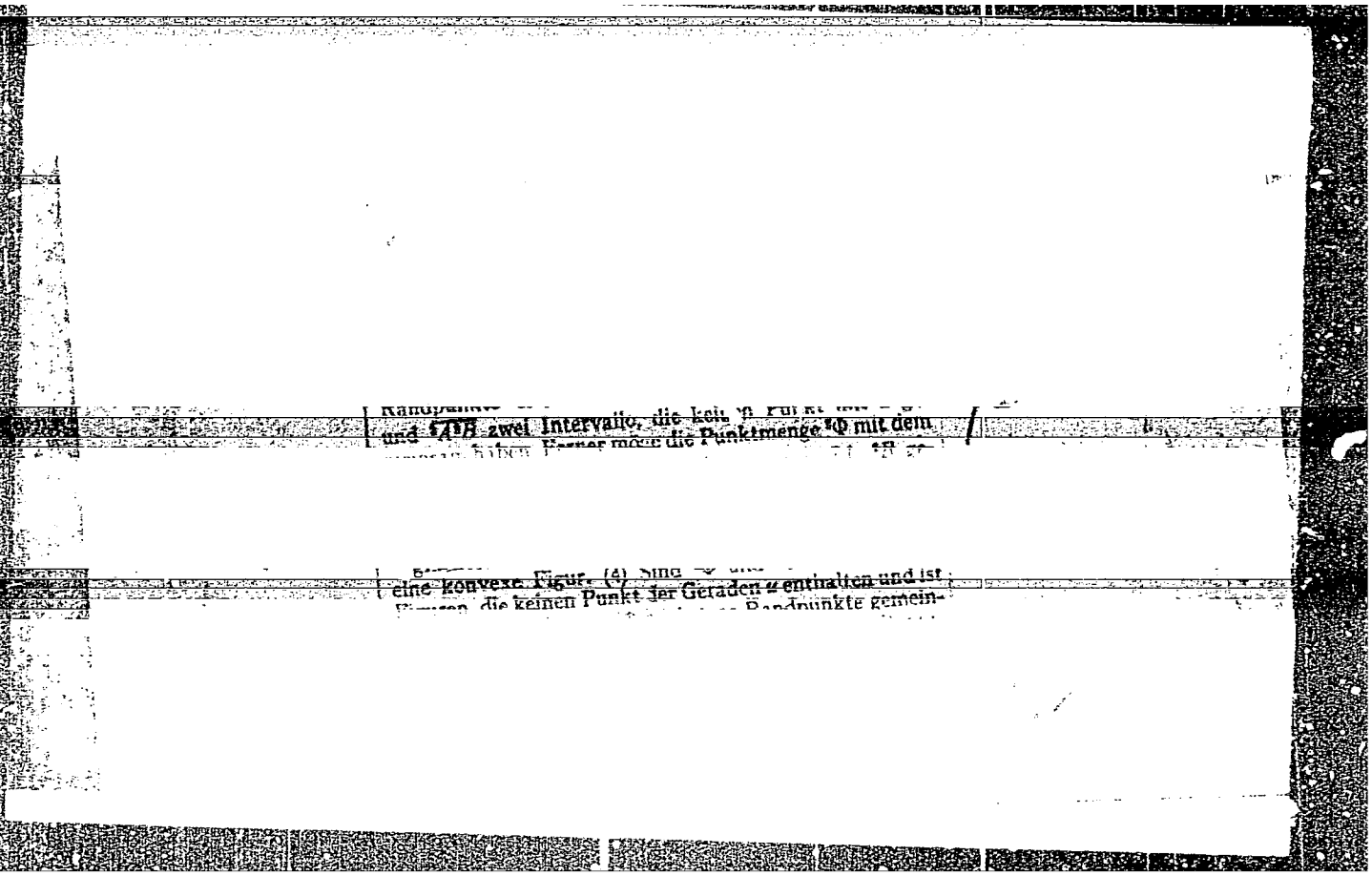
Centralized grinding of metal-cutting tools. Mashinostroenie no.5:7-8 S-O '65. (MIRA 18:9)

TVRDA, T.

"Amount of Convex Figures." p. 218, (MATEMATICKO-FYZIKALNY CASOPIS, Vol. 4, No. 4, 1954, Bratislava, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4 No. 5, May 1955, Uncl.





L 23538-66 EWT(1)/T JK

ACC NR: AP6013988 SOURCE CODE: UR/0216/65/000/001/0066/0074

AUTHOR: Satarova, N. A.; Tvorus, Ye. K.--Tvorus, E. K. 31

ORG: Institute of Plant Physiology, AN SSSR, Moscow (Institut fiziologii rastenii AN SSSR) B

TITLE: Effect of high temperatures and drought on RNA content and protein synthesis in plants

SOURCE: AN SSSR. Izvestiya. Seriya biologicheskaya, no. 1, 1965, 66-74

TOPIC TAGS: biosynthesis, protein, RNA, nucleic acid, plant metabolism

ABSTRACT: Until recently the depression of growth processes and marked disturbances in protein synthesis under the influence of drought and elevated temperatures have not been considered from the standpoint of a relationship between the protein problem and the metabolism of nucleic acids. Now it is known that growth, formative processes, and productivity in plants are very closely related to protein synthesis, in which RNA participates. The authors describe the results of an experimental investigation of the effect of a temporary (12-24-hr) increase in temperature (to 40-42 C) and of atmospheric drought on the RNA and protein content of the leaves of the potato plant. It is found that then the protein partially decomposes while the RNA content remains essentially the same and, in the leaves of temperature-hardened and

Card 1/2 UDC: 581.19: 612.015.33 2

L 23538-66

ACC NR: AP6013988

ZnSO4-treated plants, it is higher than in the leaves of control plants. Further, RNA content decreases with increasing age of plants. Experiments with N^{15} showed the existence of a correlation between RNA content and the rate of protein synthesis. The decrease in the enrichment of protein with N^{15} in the upper leaves following the drought indicates that in the complex chain of the protein synthesis reaction there exists a link more sensitive to the effect of high temperatures than the total RNA. Orig. art. has: 2 figures and 5 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 05Feb63 / ORIG REF: 020 / OTH REF: 014

Card 2/2

VESELY,Ct.; TVRDEK,V.; TVRDKOVA,E.

Contribution to the treatment of trichomonal discharge. Cesk. gyn. 25[39] no. 1/2:120-122 Mr '60.

1. II. gyn.-por. klinika KU, prednosta prof. MUDr. J.Lukas, Dr. Sc.
(TRICHOMONAS INFECTIONS ther.)
(LEUKORRHEA ther.)
(ANTIMALARIALS ther.)

TVRDIK, F.

Weather report and meteorologic dispatch. (To be contd.) P. (3) of cover.
METEOROLOGICKE ZPRAVY. Vol. 6, No. 2, May 1953

SO: Monthly East European Accession (EEAL), LC, Vol. 4, No. 9, Sept. 1955 Uncl.

TVRDIK, F.
Tvrdik, F.

Weather report and meteorologic dispatch. (To be contd.) p.(3) of cover.

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 4, No. 9, Sept. 1955, Uncl.

TVRDIK, V.

"Automatic dosing scales for loose materials."

AUTOMATISACE, Praha, Caechoslovakia, Vol. 2, no. 5, May 1959

Monthly List of East European Accessions Index (EEAI), LC, Vol. 8, No. 8, August 1959

Unclassified

S/194/62/000/007/033/160
D295/D308

AUTHORS: Smejkal, Jaromir, and Tvrdík, Václav

TITLE: Inductive indicator

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1962, abstract 7-2-43 sh (Czech. pat. cl. 21 g, 30/10; 21 c, 40/01, no. 97224, Nov. 15, 1960)

TEXT: The object of the patent is an inductive indicator for the detection of metallic and ferromagnetic bodies. The indicator is a transformer with an open magnetic circuit. To increase sensitivity, a compensation-type measurement method is introduced. Close to the gap of the magnetic circuit is situated a compensation core with a compensation winding connected in series with the secondary winding of the transformer, so that the emf's induced by the primary winding in the secondary and compensation windings are subtracted. The number of turns of the secondary and compensation windings are so chosen that in the absence of metallic bodies the resulting emf is close or equal to zero. When a metallic body is present, the reluctance of the magnetic circuit of the secondary winding is

Card 1/2

Inductive indicator

S/194/62/000/007/033/160
D295/D308

lowered and the magnetic flux through the secondary winding increases; at the same time the flux through the compensation winding decreases and an output voltage arises. 1 figure. [Abstracter's note: Complete translation.]

Card 2/2

LOCHMAN, Josef, inz.; TVRDIKOVA, Alena, promovany chemik; MELICHAROVA, Aleska

Consumption of nutritive substances by red deer (Cervus e elaphus L.). Les cas 10 no.5:495-522 My '64.

1. Research Institute of Forestry and Game Protection, Zbraslav.

VESELY,Ct.; TVRDEK,V.; TVRDKOVA,E.

Contribution to the treatment of trichomonal discharge. Cesk. gyn. 25[39] no. 1/2:120-122 Mr '60.

1. II. gyn.-por. klinika KU, prednosta prof. MUDr. J.Lukas, Dr. Sc.
(TRICHOMONAS INFECTIONS ther.)
(LEUKORRHEA ther.)
(ANTIMALARIALS ther.)

TVRDON, J.

GEOGRAPHY & GEOLOGY

TVRDON, J. Leos Janacek in the Domanova Caverns. P. 448

Vol. 35, no. 12, Dec. 1958

Monthly Index of East European Accessions (EEAI) LC, Vol. 8, No. 4, April 1959

TVRDON, J.

GEOGRAPHY & GEOLOGY

Periodicals: KRASY SLOVENSKA. Vol. 35, No. 12, Dec., 1958.

TVRDON, J. Leos Janacek in the Demanova Caverns. p. 448.

Monthly Lists of East European Accessions (EEAI) LC Vol. 8, No. 4, April 1959.
Unclass.

PROCHAZKOVA, M.; TVRDONOVA, M.

Effect of 3-acetylpyridine on glycemia in normal and adrenalectomized rats. Sborn. lek. 67 no.2:51-54 F '65.

1. Laborator pro endokrinologii a metabolismus fakulty vseobecneho lekarstvi University Karlovy v Praze (prednosta: akademik J. Charvat).

TVRTKOVIC, Reuf, sanitetski pukovnik

The problem of the extensive number of sick call in the army.
Vojnosanit. pregl. 21 no.12:782-785 D'64.

TVRTKOVIC, Reuf, sanitetski pukovnik, dr.; TOMASEVIC, Milorad, sanitetski major, dr.

Some clinical and epidemiologic aspects of the atypical pneumonia syndrome. Vojnosanit. pregl. 22 no.4:223-229 Ap'65.

1. Interno odeljenje, Vojna bolnica u Sarajevu.

TVRTKOVIC, Reuf, d-r.

Two case reports on Henoch-Schonlein syndrome. Med. arh., Sarajevo 11 no.3:33-38 May-June '57.

1. Interno odeljenje Vojne bolnice Sarajevo. Nacelnik: d-r Baruh David.

(PURPURA, NONTHROMBOPENIC, case reports
Schoenlein-Henoch's syndrome (Ser))

TVRTKOVIC, Reuf, Dr.; SEHDAREVIC, Hisam, Dr.

Problems of syndrome of atypical pneumonia. Med. arh., Sarajevo 10 no.1:27-40 Jan-Feb 56.

1. (Interno odjeljenje Vojne bolnice Sarajevo).
(PNEUMONIA, PRIMARY ATYPICAL, (Ser))

TVRTKOVIC, Rifat [illegible].

Some aspects of managing wounded and sick during the [illegible] earthquake. Vojnosanit. pregl. 22 [illegible]

JEVTIC, Zivojin; TVRTKOVIC, Rifat; PRICIC, Mithat; TRNINIC, Borivoje

3 Cases of Pierre-Marie-Bamberger disease. Srpski arh. celok. lek. 89 no.10:1207-1212 O '61.

1. Hirurska klinika Medicinskog fakulteta Univerziteta u Sarajevu Upravnik: prof. dr Feodor Lukac.

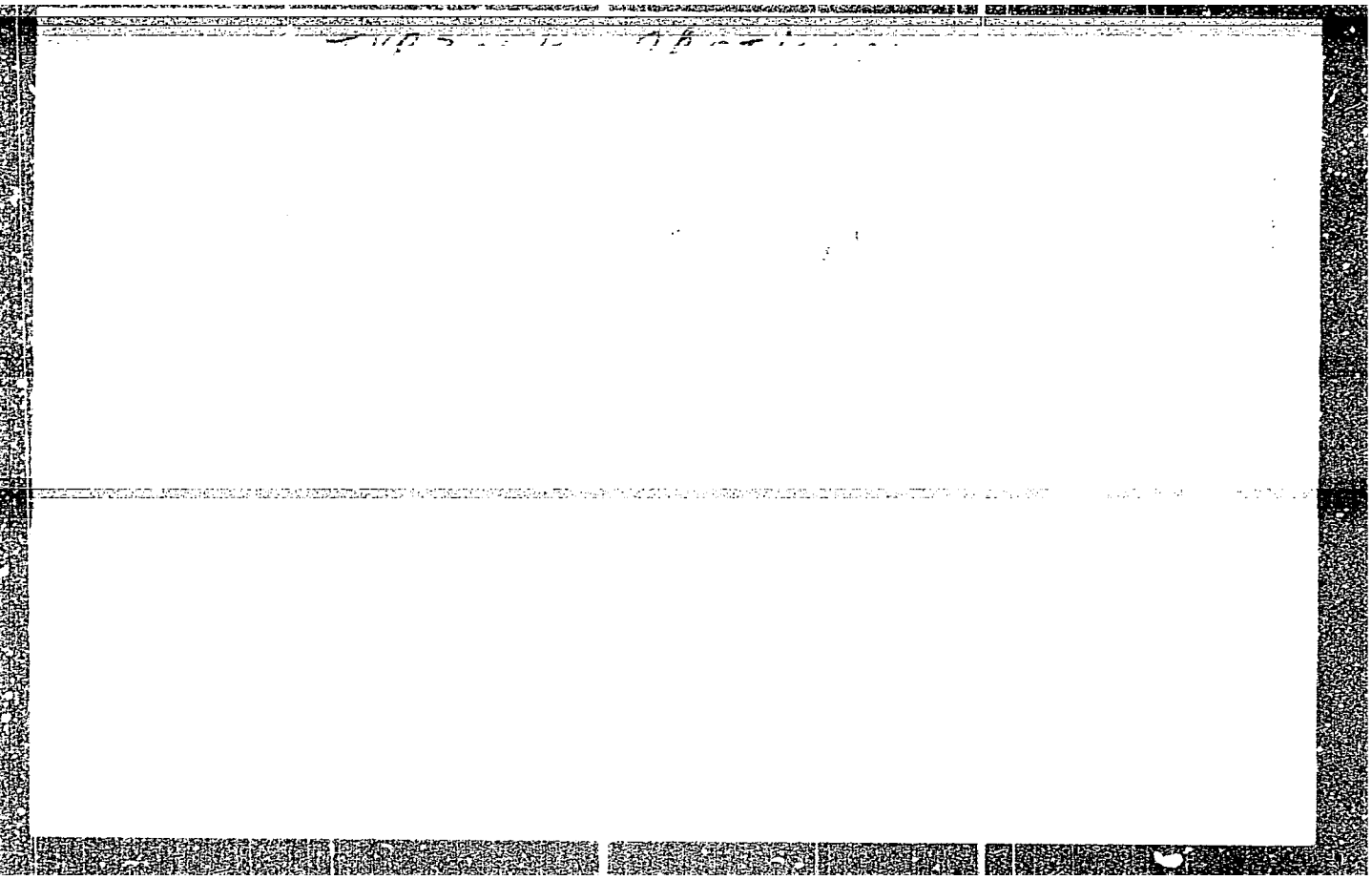
(OSTEOARTHROPATHY HYPERTROPHIC PULMONARY case reports)

5

SATAROVA, N.A.; TVORUS, Ye.K.

Effect of high temperature and drought on the RNA content and protein synthesis in plants. Izv. AN SSSR Ser. biol. 30 no.1: 66-74 Ja-F '65. (MIRA 18:2)

1. Institute of Plant Physiology, Academy of Sciences of the U.S.S.R., Moscow.



~~HRUBY, St.~~

SURNAME (in caps); Given Names

5-

Country: Czechoslovakia

Academic Degrees: /not given/

Affiliation: Faculty of Medical Hygiene (Lekarska fakulta hygienicka), KU /Karlova universita; Charles University/, Prague.

Source: Prague, Ceskoslovenska Hygiena, Vol VI, No 5, 1961, pp 310-314.

Data: "Sterilization of Spices by Means of Ethylene Oxide."

Co-athors:

MARESOVA, P., Department of Hygienical Diet (Oddeleni hyg. vyzivy), Institute of Hygiena (Ustav hygieny), Prague.

TVRZNIK, D., Central Bohemian Fruta National Enterprise (Stredoceska Fruta, n.p.)

,83

MUREK, Henryk, inz.; TWARDAWA, Bernard, mgr inz.

Modernization of a soda exchanger station for water softening.
Energetyka przem 10 no.8:289-290 Ag '62.

MUREK, Henryk, inz.; TWARDAWA, Bernard, mgr inz.

Rational water management in industrial plants. Gosp pali. 11 no.4:143-145 Ap '63.

TWARDOCH, Szczepan

Treatment of postoperative duodenal fistylae by the irrigation with lactic acid solutions. Pol. przegl. chir. 34 no.10:997-1000 '62.

1. Ze Szpitala Miejskiego Nr 2 w Tarnowskich Gorach. Ordynator: dr J. Scierski.

(POSTGASTRECTOMY SYNDROMES) (LACTATES) (INTESTINAL FISTULA) (DUODENAL DISEASES)

TWARDOCH, Szczepan

Effect of mechanical low frequency vibration on articular changes in rat extremities. Med. dosw. microbiol. 17 no.1:77-84 '65.

1. Z Zakladu Anatomii Prawidlowej Slaskiej Akademii Medycznej w Zabrzu (Kierownik: prof. dr. S. Kohmann).

GNILKA, Tadeusz; TWARDOSZ, Wladyslaw; ADAMSKI, Cyryl

Results of immediate and remote surgery of urological lesions following gynecological operations. Pol. tyg. lek. 18 no.32: 1194-1196 5 Ag '63.

1. Z II Kliniki Poloznictwa i Chorob Kobiecych AM w Poznaniu; kierownik: doc. dr E. Howorka i z I Kliniki Chirurgicznej AM w Poznaniu; kierownik: prof. dr St. Nowicki.
(HYSTERECTOMY) (BLADDER DISEASES) (URETER)
(WOUNDS AND INJURIES) (VESICOVAGINAL FISTULA)
(POSTOPERATIVE COMPLICATIONS) (IATROGENIC DISEASE)

TWARDOSZ, Wladyslaw; GNILKA, Tadeusz

Functional disturbances of the urinary bladder and upper urinary tracts after radical excision of genital organs in cancer of the cervix uteri. Pol. przegl. chir. 37 no.7: 689-692 Jl '65.

1. Z I Kliniki Chirurgicznej AM w Poznaniu (Kierownik: prof. dr. S. Nowicki) i z II Kliniki Poloznictwa i Chorob Kobiecych AM w Poznaniu (Kierownik: prof. dr. E. Howorka).

TWARDOSZ, Wladyslaw

Leiomyoma of the bladder. Pol. przegl. chir. 36 no.5:717-719 My '64.

1. Z I Kliniki Chirurgicznej Akademii Medycznej w Poznaniu (Kierownik: prof. dr S. Nowicki).

TWARDOWSKA, I.

Investigating the leaking of salt water through spruce wood. p. 139

ROCZNIKI NAUK LESNYCH Vol. 9, 1954

Poland

SOURCE: EEAL Vol 5, No. 10 Oct. 1956

TWARDOWSKI, KRZYSZTOF

SURNAME, Given Names

(5)

Country: Poland

Academic Degrees:

Affiliation:

Source: Warsaw, Medycyna Weterynarina, Vol XVII, No 8, August 1961, pp 463-466.

Data: "Activity of the Lyophilized Strain F_{107} of the Newcastle Disease Virus at Various Temperatures."

Authors:
BORZEMSKA, Wanda.
MAREK, Kazimierz, Docent dr., Director of the Department of Poultry Diseases (Zaklad Chorob Drobiu), Veterinary Research Institute (Instytut Weterynarii), Pulawy
TWARDOWSKI, Krzysztof, Magister, Director of the Branch Testing Laboratory (Branzowa Laboratorium Badawcze) of the Poultry and Egg Industry (Przemysl Jajowy-Drobiarski), Poznan.

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KOWALSKI, Edward; TWARDOWSKI, Zbylut

Uteroplacental apoplexy complicated by acute non-inflammatory renal failure. Pol. tyg. lek. 20 no.32:1210-1211 9 Ag '65.

1. Z II Kliniki Poloznictwa i Chorob Kobiecych AM w Krakowie (Kierownik: prof. dr. Maksymilian Seidler (obecnie doc. dr. Jerzy Zamello)) i z Osrodka dializy pozaustrojowej (Kierownik: doc. dr. Zygmunt Hanicki) przy II Klinice Chorob Wewnetrznych AM w Krakowie (Kierownik: doc. dr. Stanislaw Kirchmayer).

HANICKI, Zygmunt; PACZEK, Zuzanna; WIERNIKOWSKI, Adam; HIRSZEL, Przemyslaw; TWARDOWSKI, Zbylut; BOGDAL, Jozef; DUZYK, Krystyna

Result of activities of the center of extracorporeal dialysis in Krakow. Pol. tyg. lek. 19 no.35:1330-1331 31 Ag '64.

1. Z II Kliniki Chorob Wewnetrznych Akademii Medycznej w Krakowie (kierownik: doc. dr med. St. Kirmayer).

TWARDOSZ, Wladyslaw

A ureter located behind the inferior vena cava. Pol. przegl. chir. 34 no.8:829-831 '62.

1. Z I Kliniki Chirurgicznej AM w Poznaniu Kierownik: prof. dr S. Nowicki.

(URETERS)

TWARDOSZ, Waldyslaw

Spontaneous rupture of the kidney. Polski przegl.chir. 27 no: 10:1009-1014 Oct. '55.

1. Z I Kliniki Chirurgicznej A.M. w Poznaniu. Kierownik: prof. dr St. Nowicki. Poznan, ul. Dluga 1/2.
(KIDNEYS, rupture, spontaneous)

POLAND

GNILKA, Tadeusz, TWARDOSZ, Wladyslaw, and ADAMSKI, Cyryl; Second Clinic of Obstetrics and Gynecology (II Klinika Poloznictwa i Chorob Kobiecych) (Director: Docent, Dr. E. HOWORKA) and First Surgical Clinic (I Klinika Chirurgiczna) (Director: Prof. Dr. St. NOWICKI), both of the AM [Akademia Medyczna, Medical Academy] in Poznan

"Results of Immediate and Late Surgical Treatment of Injuries to the Urinary Tract Following Gynecological Operations."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 32, 5 Aug 63, pp 1194-1196

Abstract: [Authors' English summary modified] Suture of injuries to the urinary bladder or tract sustained during gynecological operations, whether performed immediately or later, is most successful provided care is taken to assure free passage of urine and prevent infection. Type and manner of operation is of significance. All 14 cases studied showed good results in control examination 1-5 years after operation. There are 18 references: One (1) Soviet, 8 Polish, 5 German, and 4 English.

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PILAWSKI, A.; TWARDOSZ, Wl.; JASINSKI, K.

Clinical applications of photoplethysmography. Polski tygod. lek. 11 no.16:673-679 16 Apr 56.

1. Z Zakladu Fizyki Lekarskiej AM w Poznaniu, kier. z. prof. A. Pilawski z I Kliniki Chirur. AM w Pozn., kier. prof. dr. St. Nowicki; z I Kliniki Chorob Wewn. AM w Poznaniu; kier. prof. dr. W. Kwasniewski, Poznan, ul. Dluga 1/2.
(PLETHYSMOGRAPHY,
photoplethysmography (Pol))

TWARDOSZ, Wladyslaw

Procedure in anuria. Polski przegl. chir. 28 no.5:489-492 May 56.

1. Z I Kliniki Chirurgicznej A.M. w Poznaniu, Kierownik: prof. dr. St. Nowicki, Poznan, ul. Długa 1, I. Klinika Chirurgiczna A.M.

(ANURIA, therapy,
(Pol))

TWAROWSKI, Wladyslaw; WALCZAK, Mieczyslaw

Basement membrane in the development of the rabbit kidney. Pat. Pol. 15 no.2:199-205 Ap-Je '64

1. Z I Kliniki Chirurgicznej Akademii Medycznej w Poznaniu (Kierownik: prof. dr. med. St. Nowicki) i z II Kliniki Chorob Dzieciecych Akademii Medycznej w Poznaniu (Kierownik: prof. dr. med. O. Szczepski).

POLAND / General Problems of Pathology. Tumors. U
Human Neoplasms.

Abs Jour: Ref Zhur-Biol., No 11, 1958, 51803.

Author : Jasinski, K., Twardosz, W.
Inst : Not given.
Title : Megakariocytic Leukemia.

Orig Pub: Przegl. lekar., 1955, 11, No 10, 300-305.

Abstract: In 2 patients with marked enlargement of the spleen and general malaise, with absence of changes in the peripheral blood, a large number of cells were noted in the bone marrow smear, among which there were many megakariocytes with delayed maturation. On one patient, splenectomy was performed, following which, his condition deteriorated very rapidly. The thrombo-

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